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W. Lawson
11/16/94

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In Re Appln. of: Robert Filepp et al. Group Art Unit: 2307

Serial No.: 08/158,029

Examiner: T. C. Lee

Filed: November 26, 1993

Title: METHOD FOR LOCATING APPLICATION RECORDS
IN AN INTERACTIVE-SERVICE DATABASE

AMENDMENT

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

In response to the Official Action dated April 28, 1994, Applicants request the following amendment be entered in their application, and that their application be reconsidered in light of those amendment and the related remarks presented below.

In the Specification:

At page 2, line 5, after "issued", delete "January" and insert --September 13--;

At page 2, line 6, beginning, insert --5,347,632--;

At page 3, line 31, after "number", insert --5,347,632--;

At page 24, line 18, after "patent", insert --5,347,632--;

At page 25, line 18, after "patent", insert --5,347,632--;

At page 27, line 16, after "patent", insert --5,347,632--;

At page 40, line 24, after "patent", insert --5,347,632--;

and

At page 59, line 19, after "patent", insert --5,347,632--;

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In the Claims:

1. (Amended) A method of searching for and retrieving records included in a database provided in a computer network, the network having a plurality of reception systems at which respective users can request and retrieve [the] respective records, the method comprising the steps of:

a. providing record locators indexed to record identifiers for the respective database records;

b. arranging [the] multiple locators and respective indexed identifiers in a plurality of groups [to define] , the groups respectively establishing predetermined [subsets] subset searches of the database records;

c. [designating] assigning code designations to the respective locator groups [by code];

d. generating [an] a locator group code designation in response to a [record] request for a record so that a group of record locators may be [presented] provided at the reception system and so that a locator may be selected which enables identification and retrieval of the record [and facilitates its retrieval].

2. (Amended) The method of claim 1 wherein providing [the] record locators indexed to record identifiers includes setting the locators as mnemonics that are indexed to the respective identifiers [designation which identify] for the respective [record] records [corresponding to the locator] in the database.

3. (Amended) The method of claim 2 wherein arranging the locators in groups includes arranging the locator mnemonics in tables in which the respective mnemonics are indexed to the respective record identifiers.

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4. (Amended) The method of claim 3 wherein [designating] assigning code designations to the respective locator groups [by code] includes [arranging] establishing the [codes] respective code designations as alphabetically sequenced character strings such that when a character sequence is entered at a reception system to designate a requested record, a locator table may be provided at the reception system from which a group of respective record identifiers may be selected.

5. (Amended) The method of claim 4 wherein providing record locators indexed to respective record identifiers includes [arranging] establishing the locators as keywords and wherein the character sequence entered at the reception system to designate a requested [records]record may be [generated with] entered using a plurality of search [strategies]procedures.

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6. (Amended) The method of claim 5 wherein the records to be searched for and retrieved [sought to be identified] are interactive applications associated with an interactive service, and wherein the applications are arranged to be generated from objects.

7. (Amended) The method of claim 6 wherein providing locator keywords indexed to respective record identifiers includes [setting] establishing the identifiers as object identifications.

8. (Amended) The method of claim 6 wherein one of the multiple search procedures for entering the character sequence at the reception system [with a plurality of search strategies] includes entering the character sequence [based on] as a description of [the] a desired application [desired].

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9. (Amended) The method of claim 6 wherein one of the multiple search procedures for entering the character sequence [with a plurality of search strategies] includes entering the character sequence [based on] as a selection of the desired application from an alphabetical listing of applications.

10. (Amended) The method of claim 6 wherein one of the multiple search procedures for entering the character sequence with a plurality of search strategies includes entering the character sequence [based on] as a selection of the desired application from a subject-category listing of applications [by subject category].

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11. (Amended) A method of searching for and retrieving [application] applications included as records in an interactive service database stored in a computer network, the network

having a plurality of reception system at which respective users can request and retrieve applications, and the applications being made up of objects collectively containing presentation data and program instructions, the method comprising the steps of:

a. preparing a plurality of tables, each table including [having various] keywords respectively referenced to application identifiers [referenced to respective keywords] so that each table [represents] establishes a predetermined subset search of the applications stored in the service database;

b. providing each table with a unique [coding] code designation;

c. generating a table code designation in response to a query entered at the reception system for an application [entered at the reception system];

d. comparing the table code designation generated with the available table [codings] code designations to select a table suited to the query;

e. [transmitting] providing the table [to] at the reception system at which the query was entered so that the requested application may be identified from the table and so that the application may be retrieved at the reception system where the query was entered.

[f. processing the table identified applications] at the reception system where the query was entered.]

12. (Amended) The method of claim 11 wherein preparing the tables includes establishing the application identifiers as object identifiers for objects used in composing [representing the applications by referring to the objects that make up] the respective applications, and wherein [the coding] assigning the respective code designations for [of] the tables includes supplying one or more letters in combination to identify [each] the respective [table] tables.

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13. (Amended) The method of claim 12 wherein generating the table code identifiers includes receiving a query for applications [in] produced using one of a plurality of different procedures and translating the query produced using one [or more] of the different procedures into a single procedure common to all the procedures [procedure] for generating the table code designations, the table code designations including one or more letters in combination to uniquely identify [an application] a table.

14. (Amended) The method of claim 13 wherein the generating of the table [codes] code designations includes receiving a query from the user for an application with a procedure selected [for] from the group of procedures consisting of selection by character string, alphabetical listing and category listing.

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15. (Amended) The method of claim 14 wherein the processing of table identified applications includes collecting at the

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reception system the objects which make up the application that are derived by using [associated with] the identified table, and executing the objects so as to present the corresponding text and graphic data for review.

REMARKS

In the Official Action dated April 28, 1994, the Examiner objected to Applicants' disclosure on the grounds of grammatical informalities in claim 2, 11 and "elsewhere" and further, rejected Claims 1-15 under 35 U.S.C. §112, second paragraph, as "indefinite." Yet additionally, the Examiner also rejected Applicants' claims 1-15 under 35 U.S.C. 102(b) as being anticipated by U.S. patent 4,429,385 issued January 31, 1984 to Chichelli et al.

Concerning the Examiner's objection to Applicants' claims on the grounds of informalities, Applicants have reviewed their disclosure and entered amendments in the specification and claims to remove typographical and grammatical errors and to update the reference to their parent application which issued September 13, 1994, as U.S. patent 5,347,632. No new matter has been added. Accordingly, Applicants would respectfully submit that the Examiner's noted objections to their disclosure have been resolved.

Turning to the Examiner's rejection of Applicants' claims. As noted, the Examiner first rejected Applicants' claims 1-15 under 35 U.S.C. §112, second paragraph, as indefinite. Particularly, the Examiner asserts Applicants have

failed to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. Applicants, however, must respectfully note that the Examiner's rejection is without foundation both as a matter of fact and as a matter of law and, accordingly must be withdrawn.

In formulating the rejection of Applicants' claims under §112, second paragraph, the Examiner has put forward a lengthy series of objections directed against the clarity of wording in each of Applicants' enumerated claims. However, on review of the Examiner's objections it is evident, the Examiner has declined to review Applicants' specification in detail and apparently has rather relied on a reading of the claims alone in an attempt to develop an understanding of them.

Applicants, however, would respectfully submit that this is improper and not in compliance with the continuously mandated test for assessing claim indefiniteness articulated by the Court of Appeals for the Federal Circuit and its predecessor the Court of Customs and Patent Appeals. Specifically, these Courts have repeatedly directed that the only test for claim indefiniteness under §112 is whether:

... one skilled in the art would understand the bounds of the claim when read in light of the specification. If the claims read in light of the specification reasonably apprise those skilled in the art of the scope of the invention, §112 demands no more. [emphasis added]

Miles Laboratories Inc. v. Shandon Inc., 27 U.S.P.Q.2d 1123, 1126 (Fed. Cir. 1993), citing *Orthokinetics Inc. v. Safety*

Travel Chairs Inc., 1 U.S.P.Q. 1081, 1088 (Fed. Cir. 1986) and *Hybritech Inc. v. Monoclonal Antibodies, Inc.* 231 U.S.P.Q. 81, 94 (Fed. Cir. 1986).

As an illustration, in rejecting Applicants' claim 1, the Examiner notes: "it is not clear how locator differs from identifier to which it is 'indexed'." A reading of Applicants' specification, however, would show that the "locators" characterize the logical organization of the database and represent what the user sees when accessing the service of the preferred embodiment, while the "identifiers" characterize the physical organization of the database and represent what the system deals with in operation. As explicitly explained in Applicants' specification in connection with the preferred embodiment, the locators are keywords which the user knows and deals with as the names of the records; i.e., applications on the service, and the identifiers are object identifiers which the system deals with in accessing objects, the physical building blocks of the records; i.e., the applications of the interactive service.

As explained in Applicants specification:

In the preferred embodiment, the network includes procedures for creating preliminary searches which represent subsets of the network applications users are believed likely to investigate. Particularly, in accordance with these procedures, for the active applications available on network 10, a library of tables is prepared, and maintained within each of which a plurality of so called "keywords" are provided that are correlated with page template objects and object-ids of the entry screen (typically the first screen) for the respective application. In the preferred embodiment, approximately 1,000 tables are used, each having approximately 10 to 20 keywords arranged in alphabetical order to abstract the

applications on the network. Further, the object-id for each table is associated with a code in the form of a character string mnemonic which is arranged in a set of alphabetically sequenced mnemonics termed the sequence set so that on entry of a character string at an RS 400, the object-id for the relevant keyword table can be obtained from the sequence set. Once the table object-id is identified, the keyword table corresponding to the desired subset of the objects and associated applications can then be obtained from network 10. Subsequently the table can be presented to the user's RS 400, where the RS 400 can provide the data processing required to present the potentially relevant keywords, objects and associated applications to the user for further review and determination as to whether more searching is required. As will be appreciated, this procedure reduces demand on server 205 and thereby permits it to be less complex and costly, and further, reduces the likelihood of host overtaxing that may cause network response slowdown.

Specification, pg. 30, ln. 17 - pg.31, ln. 7.

Still further, a yet more detailed explanation of the particular steps associated with navigation in accordance with the method of the present invention can be obtained by reviewing the description of the multiple navigation procedures given in the specification at pg. 31, ln. 14 - pg. 36, ln. 31.

It is also to be noted that Applicants' claims are in so called "open form" the transitional term "comprising" having been used between the claim preamble and body. Accordingly, it is not to be expected that each and every element of the inventive method will be expressly recited in the wording of a claim. As such, the respective claims are understood to embrace the recited elements plus additional elements that might be included in the method. *Burke Inc. v. Everest & Jennings Inc.*, 29 U.S.P.Q.2d 1393, 1397, (Fed. Cir. 1993), *Parmelee Pharmaceutical Co. v. Zink*, 128 U.S.P.Q. 271, 275 (C.C.P.A. 1961).

With regard to the Examiner's uncertainty concerning claim 1 and the "set" a locator is "selected" from, as would be apparent from a reading of the claim in view of the above referenced sections of the specification, the locators are provided in the pre-created search table, the tables being referenced in claim 1 as code designated locator groups. Reference in this respect may also be made to claim 3.

Regarding the Examiner's concern over the use of the term "facilitates" in connection with recital of record retrieval, it is to be noted that since Claim 1 is in open form, the full details of the retrieval process need not be narrated, it being sufficient to note that description of the process as noted above is described in the specification.

As to the Examiner's objection to claim 2 regarding the absence of an antecedent for the term "the locators", plainly, reference is to the "record locators" previously recited. While Applicants would respectfully submit that each and every modifier of a claim element need not be repeated in subsequent references to the element in a claim, particularly when the claim is read in light of the specification, in the interests of moving prosecution forward, Applicants have undertaken amendment to aid understanding.

With regard to the Examiner's query concerning whether the locators in claim 3 are mnemonics, it is to be noted they are, as would be apparent for a reading of the specification as well as Claim 3 and claim 2 from which claim 3 depends.

Regarding the Examiner's uncertainty concerning the locators and identifiers referred to in claim 4, as is apparent from the cited sections of the specification above noted, the tables contain locators indexed to identifiers, the locators being the mnemonics; e.g., keywords.

As to the Examiner's objection to the word "arranging" as applied to the setting of locators as keywords, Applicants have undertaken appropriate amendment. Additionally, while the specification clearly explains use of the term strategies as applied to the multiple navigation procedures, Applicants have provided amendment for the sake of clarity.

With respect to the Examiner's question concerning claim 6, particularly as to how records can be interactive, Applicants would note that where the records are objects which define applications, as described in the specification, they may include data and code capable of supporting interaction.

Regarding the Examiner's questions concerning claim 10, Applicants would respectfully refer to their specification, particularly at pg. 31, ln. 13 to pg. 36, ln. 29 for a complete explanation.

Turning to the Examiner's question concerning Applicants' claim 11, amendment has been undertaken to provide clarification. However, with respect to the Examiner's reference to the origin of the table, once again Applicants would note their claims are in open form and need not recite each and every detail of their method. However, for a more

detailed description of the procedure, reference should be made to the specification.

With regard to claim 12, clarifying amendment has been undertaken and Applicant respectfully submit Claim 12 is in acceptable form.

As to claim 13, once again, Applicants would note that the procedure described in claim 13 is clear when read in the light of the specification, however, to aid understanding, Applicants have provided remedial amendment.

Finally, once again as to claims 14 and 15, Applicants would respectfully submit that the claims are clear when read in light of the specification, however, to advance prosecution amendments have been proposed.

In view of the above remarks and noted amendments, Applicants would respectfully submit that their claims when read in light of the specification are clear, definite and apprise one skilled in the art of their scope. Accordingly, Applicants would submit that the rejection of their claims under 35 U.S.C. §112, second paragraph is improper and must be withdrawn.

Turning next to the Examiner's rejection of Applicants' claims based on the prior art, Applicants would respectfully submit that here also the Examiner's analysis is defective both as to facts and the law, and, accordingly, the rejection must be withdrawn.

In rejecting Applicants' claims 1-15 under 35 U.S.C. §102(b) the Examiner contends Applicants claims are anticipated by Chichelli et al. A review of the Chichelli et al. teaching,

however, show such a contention to be wholly without basis in fact. As noted above Applicants claims expressly recite steps for providing record locators indexed to record identifiers for the respective database records to be searched and retrieved. Further, Applicants claims call for the indexed locators and respective identifiers to be provided in groups that establish predetermined subset searches of the database records. As pointed out in Applicants' specification at pg. 30 ln. 16 - pg. 31, ln. 7, this approach has particular advantage in an interactive service as it reduces demand on the network resource for support and thus shortens response times and speed service performance.

Chichelli et al. provide not such teaching. Indeed, Chichelli et al. teach an entirely different approach to and entirely different service and database design. Chichelli et al. do not teach use of record locators indexed to respective record identifiers for the respective database records, or the grouping of locators and indexed identifiers in predetermined subset searches. In fact Chichelli et al. teach only the use of a record identifier for use in their record retrieval procedure.

Chichelli et al. refer to their database records as "frames" and note that the frames concern, in preferred form, classified advertising (col. 5, ln. 20 - ln. 22). Further, Chichelli et al. expressly state the logical organization of their database; i.e., the structure the user sees is hierarchical; i.e., many levels, and that the physical organization is serial sequential; i.e., a repeating,

noninteractive broadcast carousel of frames. Further, Chichelli et al. teach only the use of a frame identifier to retrieve frames of data; i.e., records. As noted at col. 9, ln. 43 - 46, the frame identifier includes a frame number (24 bits), path (200 bits) and frame attributes (32 bits) to define the frame identifier.

Still further, Chichelli et al. neither discloses nor suggests use of predetermined subset searches of the database. Rather, Chichelli et al. propose the laborious and extended procedure of requiring the user to define a the frame identifier for a desired frame each time it is requested. Specifically, Chichelli et al. teaches that the user must generate the path portion of the frame identifier by moving through a sequence of hierarchical screens, selecting the categories of information sought and thereafter move through a relational screen to set the frame identifier attributes. Once this is done, the system software adds a frame number and supplies the identifier to circuitry that "grabs" the frames from the continuous stream (col. 8, ln. 37 - col. 9, ln. 64; col. 11, ln. 18 - col. 14. ln. 9; and Fig. 3A, 3B).

Chichelli et al. simply does not relate to Applicants' claimed invention. Indeed, the Examiner's efforts to fit the Chichelli et al. teaching into Applicants' claims in motivated solely buy hindsight and is wrong as a matter of technical fact. The Examiner refers to Chichelli et al. as including locators and identifiers and points to col. 8, ln. 43 - 44. That reference, however, is incorrect as it describes the information

content of the frame itself. As noted, Chichelli et al. refers only to a frame identifier which includes a frame number, path and attributes (col. 9, ln. 42 - 46). Further, the Examiner's reference to col. 8, ln. 15 - 16 is also mistaken. Though the Examiner maintained the reference is to arranging groups of locators, in fact no such description is provided. Indeed the noted reference concerns menu items in a teletex environment. Chichelli et al. simply has no teaching that discloses or suggest record locators indexed to record identifiers and no teaching that discloses establishment of groups of locators and identifiers in predetermined database subset searches. Thus, as a matter of law, Chichelli et al. can not anticipate Applicants' invention as claimed.

The Court of Appeals for the Federal Circuit (CAFC) and its predecessor, the Court of Customs and Patent Appeals (CCPA), have repeatedly held that for a prior art reference to anticipation a claimed invention under 35 U.S.C. §102, each and ever element of the claimed invention must appear in the single reference. *Diversitech Corp. v. Century Steps, Inc.*, 7 USPQ2d 1315, 1317 (Fed Cir 1988). Further, the CAFC has pointed out that the elements of the claimed invention must be arranged in the reference as they are in the claimed invention in order to establish an anticipation. *Lindemann Maschinefabrik v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed Cir 1984).

Therefore, because Chichelli et al. has no suggestion of record locators or combined of record locators with record identifiers or arrangement of record locators and indexed identifiers in groups, chichelli et al. can not as a matter of

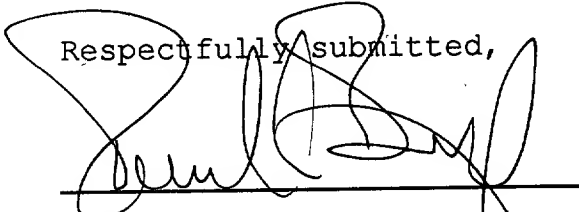
law be considered to anticipate applicants claims. Accordingly, the Examiner's rejections of claims 1-15 as anticipated under 35 U.S.C. §102(b) is erroneous and must be withdrawn.

However, while Applicants believe their invention as claimed is distinguished over the art, in an effort to further clarify those distinctions and to move their application to allowance, Applicants have proposed the clarifying amendments above noted. Support for the amendment of claim 1-15 can be found at least at pg. 29, ln. 16 - pg. 36, ln. 29.

Accordingly, in view of the noted amendments and preceding remarks, Applicants would respectfully submit that their invention is patentably distinguished from the art cited, and, that all objections raised by the examiner have been resolved. Therefore, Applicants, requests reconsideration of their application and issuance of a patent thereon.

Dated: October 28, 1994,

Respectfully submitted,


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Attorney for Applicants
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New York, New York 10279

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231, on October 28, 1994.

Name of Registered Representative: Paul C. Scifo, Esq.
Signature: 
Date: October 28, 1994



Handwritten signature/initials

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In Re Appln. of: Robert Filepp et al.
Serial No.: 08/158,029
Filed: November 26, 1993
Title: METHOD FOR LOCATING APPLICATION RECORDS
IN AN INTERACTIVE-SERVICE DATABASE

Group Art Unit: 2307
Examiner: T. C. Lee

TRANSMITTAL LETTER

The Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

In connection with the above referenced application, I am enclosing herewith:

I. A reply to the Office Action of April 28, 1994, the reply including:

1. An amendment of 17 pages; and
2. A petition to extend the time to reply by three months.

No amendment fee is required based on the following calculation:

	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NO. PREV. PAID	EXTRA	RATE	FEE
TOTAL:	15	20	0	22.00 \$	0
INDEP.	2	3	0	76.00 \$	0
MULTIP. DEP.	0	0	0	240.00 \$	0
TOTAL \$					0

II. Additionally, in accordance with Applicants' duty under 37 C.F.R. 1.56, I am also enclosing herewith a voluntary disclosure of 34 pages under 37 C.F.R. 1.97(c) and in compliance with 37 C.F.R. \$1.98.

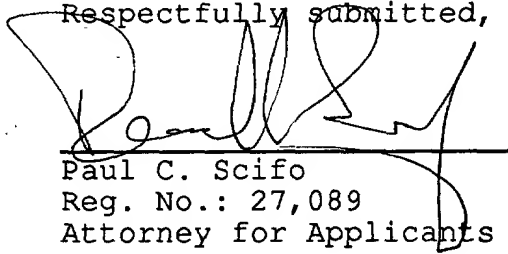
III. Finally, I am also enclosing an attorney check in the amount of \$1,080 to cover the fee to extend time to reply by three months (\$870, 37 C.F.R. \$1.17(c)) and the fee to file the disclosure statement with the reply to the first action (\$210, 37 C.F.R. \$1.17(p)).

The Commissioner of Patents and Trademarks
October 28, 1994
Page 2

In the event there are any questions concerning these items, please feel free to contact me during business hour either by telephone at (212) 513-1122, or by FAX at (212) 513-1123. Your assistance is appreciated.

Dated: October 28, 1994.

Respectfully submitted,

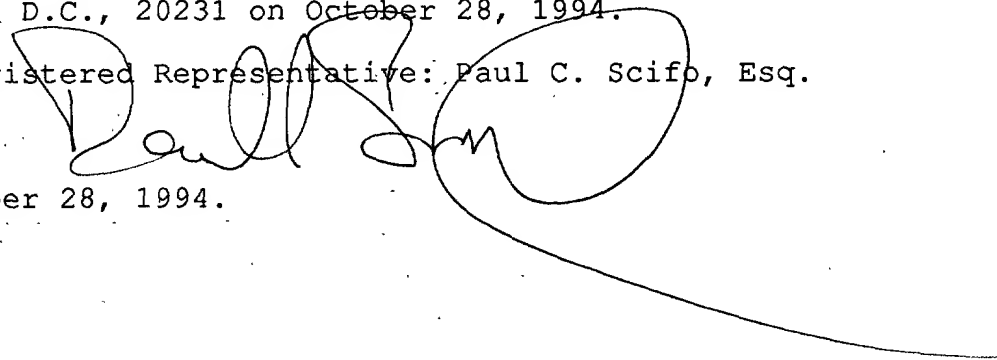


Paul C. Scifo
Reg. No.: 27,089
Attorney for Applicants

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope address to the Commissioner of Patents and Trademarks, Washington, D.C., 20231 on October 28, 1994.

Name of Registered Representative: Paul C. Scifo, Esq.

Signature:



Date: October 28, 1994.